DCLU

Director's Rule 3-2001

Applicant:	Page	Supersedes:
City of Seattle Department of Design, Construction and Land Use	1 of 7	NA
	Publication: 9/6/01	**Effective:** 12/3/01
Subject: Approved Alternate Accessibility Guidelines for Building Elements Designed for Children's Use	**Code and Section Reference:** 1997 Washington State Building Code, Chapter 11	
	Type of Rule: Code Interpretation	
	Ordinance Authority: SMC 3.06.040	
Index Seattle Building Code, Technical Standards	**Approved** R.F. Krochalis (signature on file)	**Date** 11/20/01

Background

The Architectural and Transportation Barriers Compliance Board (the Access Board), a federal agency charged with developing design guidelines to implement the 1990 Americans With Disabilities Act (ADA), adopted guidelines for alternate specifications of building elements designed for use by children ages 12 and younger. These guidelines provide alternate specifications based on children's dimensions and anthropometrics for drinking fountains, water closets, toilet stalls, lavatories, sinks, and fixed or built-in seating and tables. The guidelines are designed to ensure that newly-constructed and altered building elements intended for use by children ages 12 and younger are usable by children with disabilities.

The Washington State Building Code Council adopted State Building Code Interpretation No. 01-01, which states that a local building official may approve alternate dimensions for certain building elements. The interpretation specifically references alternate dimensions approved by the Access Board.

Rule

The Americans with Disabilities Act Accessibility Guidelines (ADAAG) for Buildings and Facilities; Building Elements Designed for Children's Use, as adopted by the Access Board and set forth at 36 CFR Part 1191, are approved as alternates to the accessibility design requirements set forth in Chapter 11 of the 1997 Seattle Building Code for the following building elements:

- drinking fountains,
- water closets,
- toilet stalls,
- lavatories,
- sinks, and
- fixed or built-in seating and tables.

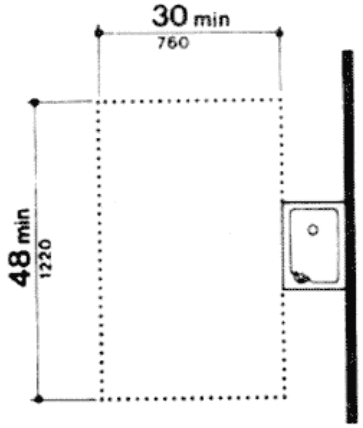
These guidelines are not mandatory, but are approved for use as alternates for building elements intended for use primarily by children ages 12 and younger. Access Board-approved design guidance also is offered in Appendix A of this rule regarding children's reach ranges, handrails for ramps and stairs, and accessible routes and ramps.

Note: Tables 1-4 show dimensions suggested for children of different age groups. Designers may select the dimension most appropriate to the age of children expected to be the primary users of the building element. Designers should then choose dimensions from each table to accommodate the same age group, e.g. if a water closet centerline dimension from Table 1 is chosen for 5 to 9 age group, then dimensions from Tables 2-4 should be chosen for the same age group.

I. Accessible Drinking Fountains

Clearance for knee space under an accessible drinking fountain is not required where clear floor space for parallel approach is provided of 30 inches (760 mm) by 48 inches (1220 mm) and where the spout is no higher than 30 inches (760 mm) measured from the finished floor or ground surface to the spout outlet (rather than 36 inches for adult drinking fountain spout height).

Figure 1. Clear Floor Space for Accessible Drinking Fountain



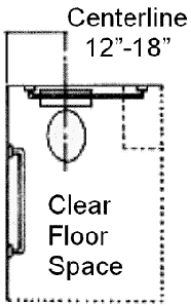
II. Accessible Water Closets

A. Centerline. The centerline of the water closet may be 12 inches minimum to 18 inches maximum (305 mm to 455 mm) from the side wall or partition (rather than 18 inches for the center line of adult water closets). Clear floor space may be arranged to allow either a left- or right-hand approach.

Table 1: Recommended Water Closet Centerline Dimensions per Age Group

	Ages 4 and under	Ages 5 though 9	Ages 9 through 12
Water Closet Centerline	12 in (305 mm)	12 to 15 in (305 to 380 mm)	15 to 18 in (380 to 455 mm)

Figure 2. Water Closet Center Line Dimension Range

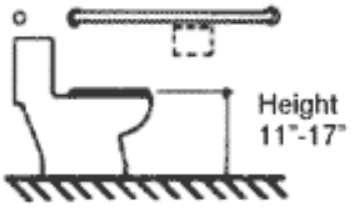


B. Height. The toilet seat may be 11 inches minimum to 17 inches maximum (280 mm to 430 mm) above the finished floor, measured to the top of the toilet seat. Seats shall not be sprung to return to a lifted position.

Table 2. Recommended Toilet Seat Height per Age Group

	Ages 4 and under	Ages 5 though 9	Ages 9 through 12
Toilet Seat Height	11 to 12 in (280 to 305 mm)	12 to 15 in (305 to 380 mm)	15 to 17 in (380 to 430 mm)

Figure 3. Toilet Seat Height Range



C. Grab Bars. Grab bars for children's water closets shall comply with adult requirements specifying strength and length, but they may be mounted lower—18 inches minimum to 27 inches maximum (455 mm to 685 mm) above the finished floor measured to the grab bar centerline (rather than 33 to 36 inches above the finished floor for adult grab bars).

Grab bars mounted behind the water closet shall be 36 inches (915 mm) in length. However, where the centerline of the toilet stall is less than 15" from the side wall, or if a tank or flush valve interferes with grab bar placement, the rear grab bar can be a minimum of 24" long if placed on the open side of the toilet.

Table 3. Recommended Grab Bar Height per Age Group

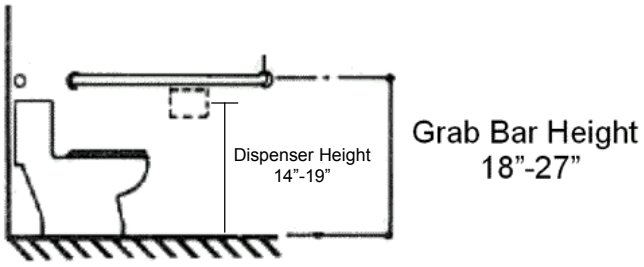
	Ages 4 and under	Ages 5 though 9	Ages 9 through 12
Grab Bar Height	18 to 20 in (455 to 510 mm)	20 to 25 in (510 to 635 mm)	25 to 27 in (635 to 685 mm)

D. Dispensers. Toilet paper dispensers shall be installed 14 inches minimum to 19 inches maximum (355 mm to 485 mm) above the finished floor measured to the dispenser centerline. Practice Note: Be sure to provide enough space between the grab bar and the dispenser to allow access for service and use.

Table 4. Recommended Dispenser Height per Age Group

	Ages 4 and under	Ages 5 though 9	Ages 9 through 12
Dispenser Height	14 in (355 mm)	14 to 17 in (355 to 430 mm)	17 to 19 in (430 to 485 mm)

Figure 4. Grab Bar and Dispenser Height Ranges



E. Flush Controls. Flush controls shall be located on the wide side of the toilet area no more than 36 inches (915 mm) above the finished floor.

Note: Flush controls for children's water closets (like those for adult water closets) must comply with specifications for operation. That is, they are to be operable by wrist or arm pressure, and must not require tight grasping, pinching, or twisting to operate. They must require no more than 5 pounds of force to operate. See WSBC Section 1106.3.

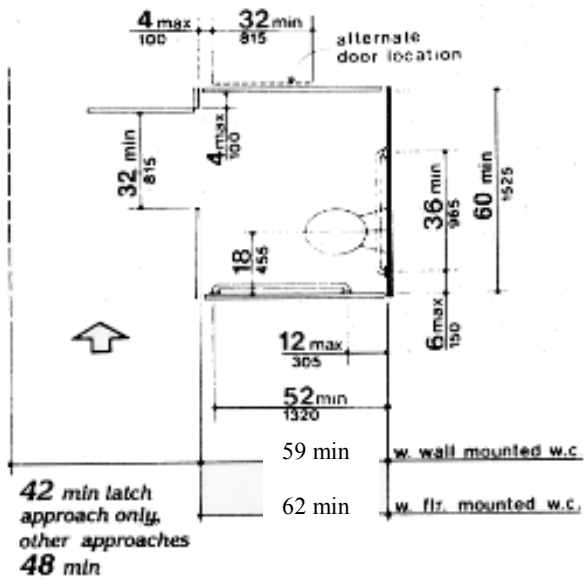
III. Toilet Stalls for Children

Toilet stalls for children are required to be slightly larger than those for adults because most children using wheelchairs need additional maneuvering room.

A. Standard Stall Size and Arrangement. Toilet stalls shall comply with the following:

1. Depth:
   a. Wall-mounted water closets: minimum 59 inches (1500 mm)
   b. Floor-mounted water closet: minimum 62 inches (1575 mm)
2. Width: minimum 60 inches (1525 mm)

Figure 5. Standard Stall Size and Arrangement



B. Toe Clearances. Standard stalls shall provide a toe clearance of at least 12 inches (305 mm) above the finished floor (rather than 9 inches in adult stalls) in the front partition and at least one side partition. (Children above 6 years of age often use wheelchairs that are about the same size as those of adults. However, because their legs are shorter their footrests will be higher.)

Exception: Toe clearance is not required the for following stall arrangements:

1. stall depth greater than 60 inches with a wall mounted water closet, or
2. stall depth greater than 62 inches with a floor mounted water closet.

C. Doors. Doors on accessible toilet stalls used primarily by children must comply with adult provisions for toilet stall doors. See Washington State Building Code (WSBC) Sections 1106.3 and 1106.11.3.

IV. Lavatories and Sinks

A. Used Primarily by 6-12 year olds. Lavatories and sinks required to be accessible and used primarily by 6 to 12 year olds are permitted to have minimum apron and knee clearances 24 inches (610 mm) above the finished floor (rather than 29 inches minimum clearance for adults), provided that the rim

or counter surface is not higher than 31 inches (760 mm) (rather than the 34 inch maximum height for adults).

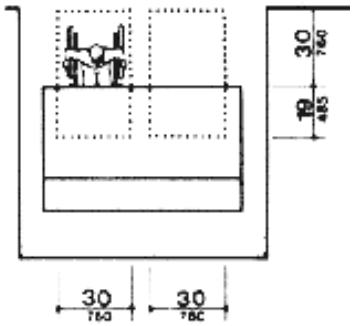
B. Used Primarily by 5 year olds and younger. Lavatories and sinks used primarily by 5 year olds and younger are not required to meet knee clearance requirements if clear floor space for a parallel approach of 30 inches (760 mm) by 48 inches (1220 mm) is provided. See Figure 1.

V. Children's Fixed or Built-in Seating and Tables

A. Used Primarily by 6-12 year olds.

1. Seating. Washington State Building Code Chapter 11, Section 1106.19. Clear floor space of 30 inches (760 mm) by 48 inches (1220 mm) allowing a forward approach is required for children using wheelchairs at fixed tables or counters. Up to Nineteen inches (485 mm) of this clear floor space may be located below the table or counter to provide adequate knee and toe space. (These requirements are the same for adults.)

Figure 7. Accessible Dimensions for Fixed or Built-in Seating and Tables



2. Height of Tables or Counters. The tops of accessible tables and counters may range from 26 inches to 30 inches (660 mm to 760 mm) above the finished floor.
3. Knee Clearances. If seating is provided at tables or counters, knee spaces a minimum of 24 inches (610 mm) high, 30 inches (760 mm) wide, and 19 inches (485 mm) deep shall be provided.

B. Used Primarily by 5 year olds and under.

1. Seating. Washington State Building Code Chapter 11, Section 1106.19. Clear floor space of 30 inches (760 mm) by 48 inches (1220 mm) is required for children using wheelchairs at fixed or built-in tables or counters. The clear floor space shall not overlap knee space by more than 19 inches. Clearance for knee space is not required where clear floor space of 30 inches (760 mm) by 48 inches (1220 mm) is provided for a parallel approach. See Figure 1.
2. Height of Tables or Counters. There are no height requirements for accessible tables and counter used primarily by children age 5 and younger.
3. Knee Clearances. There are no minimum knee clearance requirements for accessible fixed or built-in seating and tables used primarily by 5 year olds and under.

Appendix A: Additional ADAAG Advisory Information

The ADAAG provides advisory information in an appendix addressing reach ranges, handrails for ramps and stairs, design of accessible routes and ramps, and mirror positioning, The ADAAG advisory information is summarized as follows:

I. Reach Ranges

The specifications in the table below may be used when children are the primary users. These specifications can be applied to miscellaneous building elements such as coat hooks, lockers, or other similar features used by children in wheelchairs. The following dimensions apply to either forward or side reaches.

Forward or Side Reach	Ages 3 and 4	Ages 5 though 8	Ages 9 through 12
High (Maximum)	36 in (915 mm)	40 in (1015 mm)	44 in (1120 mm)
Low (Minimum)	20 in (510 mm)	18 in (455 mm)	16 in (405 mm)

II. Handrails for Ramps and Stairs

When children are the primary users of ramps and stairs in a building, a second set of handrails at an appropriate height can help them use the stairs safely. ADAAG advisory information recommends installing handrails at a maximum height of 28" (measured from the top of the rail to the stair or ramp surface). At least 9 inches vertical clearance shall be provided between upper and lower handrails to prevent entrapment between the rails. (**Practice note:** For child care center applications, check with the Department of Social and Health Services Division of Childcare and Early Learning as regulations may be forthcoming regarding handrails for ramps and stairs. Inquiries about the Division of Child Care and Early Learning: AskCCEL@dshs.wa.gov or by mail: DSHS, Division of Child Care and Early Learning, PO Box 45700, Olympia, WA 98504-5700. Inquiries about DSHS and its programs: Constituent Services: 1-800-737-0617.)

III. Accessible Routes and Ramps

Designers should always consider how children will use and navigate other elements in a building. For example, children may need wider routes and additional clear floor space because they are less adept at maneuvering wheelchairs. In addition, it is often difficult for children who use wheelchairs to navigate a 1:12 maximum slope. Consider reducing the slope by using a pitch of 1:16 to 1:20.

IV. Mirrors

If mirrors are used with lavatories designed for children, they should be mounted with the bottom edge of the *reflecting surface* no higher than 34" above the finished floor. If this is not possible because of the way fixtures are placed, mirrors should be mounted at the lowest height possible. Other options include tilting the mirror above the lavatory out at the top or using full length mirrors. If full length mirrors are used, they should be at least 74" high and have a clear floor space of 30" by 48" in front. A single full length mirror can accommodate all people.